

SESSION II

TIME: Tuesday 9 May, 1:30-3:30

ROOM: Elizabethan Room A

TOPIC: Lessons Learned in External Peer Review

MODERATOR: Steve Cone, HQ

To bolster the independence of the review process, the Corps has been more frequently employing reviewers from outside the Corps, which has come to be known as External Peer Review (EPR). The relationship between Independent Technical Review (ITR) and EPR has been presented in the Peer Review guidance (EC 1105-2-408). The Corps has used external reviews even prior to the issuance of the Circular. Some notable examples are: the navigation studies on the Upper Mississippi River System, Columbia River and Delaware River; the ecosystem restoration studies in the Louisiana Coastal Area and Everglades (both have extensive peer review organizations established and have had NRC reviews as well); and the studies of the Seven Oaks Dam and the Folsom Dam. Each external review process has been unique, tailored to the specific circumstances of the study.

This panel is comprised of individuals who have worked on Corps External Peer Reviews in various capacities – as reviewers, review managers, and EPR panel members. Viewpoints of both Corps and non-Corps participants will be reflected, with emphasis on identifying lessons learned and best practices across the range of EPR's conducted to date. Topics will include:

- Overview of Corps' External Peer Review – Steve Cone, HQ
- Views from an external panel member – Dan Smith, Tioga Group
- Managing external peer reviews – Jack Kiefer, Camp, Dresser & McKee Inc.
- Savannah Harbor and Miami River – Terry Stratton, SAD
- Columbia River Deepening – Jim Fredericks, NWD

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ROOM: California West

TOPIC: Hurricane Katrina IPET Consequences Assessment

MODERATOR: Norm Starler, IWR

The flooding and the level of destruction imposed by Hurricane Katrina are unprecedented from a natural disaster in U.S. history. The consequences from this event are both widespread and long-lasting. They can be described in economic, human health and safety, social and cultural, and environmental terms. This session will present four assessments being undertaken by the Interagency Performance Evaluation Task Force (IPET), Task 9.

Regional and National Economic Impacts (Ian Mathis, IWR)

The assessment of consequences has several purposes integral to understanding the dimensions of the event that happened. The direct economic impact includes damages to residential, commercial, and public assets as well as job and business losses. The economic impacts of the event went far beyond the direct impacts on the residents and businesses in New Orleans. Impacts were local, regional and national in scope. To assess economic impacts within unusually limited timeframes, the team went beyond the standard economic paradigm the Corps employs when evaluating flood/storm protection projects. The purpose of this session is to provide an overview of the approach developed to measure direct local, regional and national impacts. Efforts included using Geographic Information Systems (GIS) for relational data

linkages and analysis combined with econometric models which together were augmented with statistics from the Bureau(s) of Labor, FEMA, and other supporting agencies which are not generally available.

The Human Health and Safety Consequences of Hurricane Katrina (Paul Scodari, IWR)

The objective of the human health and safety consequences is to; 1) quantify flood-related mortality risks in the five parishes that make up the greater New Orleans metropolitan area under different flood risk scenarios, and 2) characterize actual and potential impacts on human health and safety resulting from Hurricane Katrina. Potential loss of life due to flooding will be estimated for several risk scenarios, including pre-Katrina risks, the Katrina event assuming no failure of the hurricane and flood protection system, and residual risks following repairs. Event-flooding data will be used to estimate potential loss of life in each risk scenario. This empirical modeling required use of an appropriate model for estimating potential loss of life due to flooding together with GIS profiles of demographic and related data for the five parishes of greater New Orleans for both pre-Katrina and post-Katrina base cases. The work will be useful to planners and decision makers considering future hurricane prevention measures for New Orleans as well as those considering how to incorporate these factors into the standard Corps planning approach.

The Social, Cultural, and Historic Consequences of Hurricane Katrina (John Singley, IWR; Ed Rossman, Tulsa District)

The breadth the social, cultural and historic consequences of Hurricane Katrina are unprecedented. Documenting these consequences on a local, regional, and national level is part of IPET Task 9. Furthermore, understanding these consequences is an essential part of the decision making associated with future hurricane protection. Going forward, how many people will reoccupy the flooded areas, what kind of social institutions will be there in the metropolitan area, what will neighborhood be like in the summer 2006? The answer to those questions is critical to planners and decision makers. Though highly important, capturing the full scale and complexity of the event is recondite. The Social, Cultural and Historic subtask team addressing Katrina's consequences is composed of experts in disaster research, demographics, social geography and cultural resources. The team has developed a conceptual framework and methodology to address the complex questions. Their work utilizes both quantitative and qualitative measures. The presentation discusses the challenges of the study and the manner in which the team addresses those challenges.

IPET Task 9 Approach To Study: Environmental Consequences (Dick Cole, IWR)

Task 9 included environmental consequences. The approach followed Corps project planning steps. The subtask problem was defined and recast as subtask objectives. These included characterizing the significant environmental consequences associated with the storm and separating them from consequences caused by the failure of the hurricane flood protection system to perform as planned. Pre-and post-system conditions were inventoried and a conceptual model of the impacted ecosystem was developed, including identification of environmental resources and pathways between sources of impact and resource consequences. The resource condition indicators included fish and shellfish; threatened and endangered species; vegetated wetland, open-water and benthic habitats; fisheries, and pest species. The greatest concern was contaminant and pest species movement through pathways created by failure of the flood protection system to perform as planned. A contaminants fate model was used to assess pathways of contaminants movement between flood protected areas and surrounding ecosystems. Various measures for assessing impacts were considered, evaluated, and compared for completeness and effectiveness, and a scope of work was drafted for implementation consideration by a team of environmental scientists at ERDC. The data were gathered from reliable sources and included new data gathered by ERDC. Analysis and reporting are progressing consistent with study objectives.

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ROOM: Elizabethan Room B

TOPIC: Water Resources Collaboration "California Style"

MODERATOR: Tom Kendall, San Francisco District

This panel discussion will look at the experiences from four different California projects that have used or are using a collaborative planning process. Lessons learned and being learned from California's Statewide Water Plan, the South Bay Salt Pond Restoration Project and the related Corps's South San Francisco Bay Shoreline Study (the West Coast's largest multipurpose ecosystem-restoration and flood-damage reduction project), and downtown San Jose's Guadalupe River Project will be discussed.

Collaborative Versus Technocratic Policymaking: California's Statewide Water Plan (Ariel Ambruster and William D. Leach, Center for Collaborative Policy, CA State University, Sacramento)

Many statutes require that stakeholders (citizens, advocacy groups, and other agencies) be given opportunities to review and comment on new policies proposed by federal and state agencies. But what would happen if an agency recruited those same stakeholders to collaboratively design its new policies from the ground up? California's Department of Water Resources conducted a similar sort of experiment when, using a relatively technocratic process, it issued the state's comprehensive Water Plan in 1998 after receiving public comments, and then three years later, hired outside mediators to lead a five-year consensus-seeking stakeholder process, resulting in a revised Water Plan in December 2005. This study compares the two planning processes and their outcomes. By reviewing the 1998 and 2005 Water Plans and interviewing two dozen stakeholders and staff, many of whom were active in both planning iterations, the study illustrates similarities and differences between technocratic and collaborative approaches. The study focuses on several types of outcomes including policy innovation, new data, shared knowledge, social and political capital, stakeholder satisfaction, and the development of new personal and institutional practices and skills.

Collaboration California Style: Ecosystem Restoration and Flood Protection in a National Wildlife Refuge (Brenda Buxton, California State Coastal Conservancy; Beth Dyer, Santa Clara Valley Water District; and Steve Ritchie, South Bay Salt Pond Restoration Project)

The South Bay Salt Pond Restoration Project is a collaborative planning effort to develop an integrated habitat restoration, flood protection, and public access plan on 15,100 acres of former salt production ponds. The effort is being led by the California State Coastal Conservancy, the California Department of Fish and Game, and the U. S. Fish and Wildlife Service in collaboration with the Santa Clara Valley Water District, the Alameda County Flood Control and Water Conservation District, and the Corps of Engineers (San Francisco District). One of the unique aspects of this effort is that 9,600 acres of the ponds are within the Don Edwards San Francisco Bay National Wildlife Refuge: a wildlife refuge in the heart of Silicon Valley. The Restoration Project was commenced without Corps involvement but is now being integrated with the South San Francisco Bay Shoreline Study, a Congressionally-authorized effort for which the Coastal Conservancy and the Santa Clara Valley Water District are the non-Federal sponsors. The integration requires the collaborating agencies to adapt to Corps protocols and the Corps to adapt to an extremely open and transparent process.

Planning Challenges in the South San Francisco Bay Shoreline Study (Judy P. Sheen, Ph.D., San Francisco District)

The South San Francisco Bay Shoreline Study (Shoreline Study) is the West Coast's largest multipurpose (ecosystem-restoration and flood-damage reduction) project. The project will also provide wildlife-compatible recreational opportunities in one of the nation's largest urban areas. The study area consists of approximately 15,000 acres of former commercial salt ponds at the south end of San Francisco Bay and 26 miles of associated and adjacent shoreline. The acquisition of the South Bay salt ponds by the State of California and the Federal government in 2003 using a combination of public and private funds provided an unprecedented opportunity for landscape-level wetland restoration, improving the physical, chemical, and biological health of San Francisco Bay. The Shoreline Study is a multi-agency effort that crosses Federal, State, and local jurisdictions and faces various opportunities and challenges from a planning perspective, including integration with a locally led effort (the South Bay Salt Pond Restoration Project) that will help establish landscape-level goals and key stakeholder relationships, plan formulation for a multipurpose project, and the role of monitoring and adaptive management in habitat restoration. This paper will provide an overview of these (and other challenging) issues and discuss how the project delivery team is approaching them.

Guadalupe River: The Rediscovery of a Natural Resource in San Jose's Urban Core (David J. Chesterman, P.E., Santa Clara Valley Water District).

There are several key lessons learned during the planning and implementation of the Guadalupe River Project. First and foremost, collaboration is absolutely essential to bring together the diverse interests to successfully plan, design and construct a project of this magnitude. Even among the many participants who share the same environmental goals, it quickly becomes clear that there is no single correct answer to best meet those goals. Second, continued study and adjustment of the physical system, so called adaptive management, is essential to meeting environmental and habitat protection goals. Finally, the construction of this project in the urban core of Downtown San Jose has lead to the rediscovery of this forgotten resource in the middle of Silicon Valley, our urban rivers.

What's next? The Santa Clara Valley Water District will continue to apply these lessons learned as we complete the six mile long \$220 million Upper Guadalupe River Project in partnership with the Army Corps of Engineers, the City of San Jose and their other local partners and interest groups. The planned 10 year construction effort will complete a 20-mile long urban river corridor rivaling any in the nation.

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ROOM: Elizabethan Room C

TOPIC: Peer Review and Planning Model Certification

MODERATOR: Margaret Johanning, Headquarters

Peer Review

In this session, participants from HQ and the Planning Centers of Expertise (PCX) will examine the new guidance on peer review (EC 1105-2-408) and its implications for study teams, including:

- The national emphasis (OMB Bulletin) on information quality and peer review
- The roles of the Planning Centers of Expertise in the Corps' peer review
- Independence in review: outside the District, and external to the Corps
- Building and managing effective ITR teams
- Developing review guides, to help reviewers and study teams
- Coordinating and publishing review plans – a new requirement prior to the FCSA
- Using DrChecks as a tool to manage and document reviews

The session will center around two discussions of lessons learned from PCX experiences. Becky Moyer (HQ) will present lessons learned from the Deep Draft Navigation PCX in conducting peer reviews, and Peter Blum (NAD) will discuss how the Hurricane and Storm Damage Reduction PCX approaches conducting peer reviews.

Planning Model Certification

In the second part of the session, Lillian Almodovar from the Institute of Water Resources will discuss the “basics” of Planning Model Certification (EC 1105-2-407) and lead a discussion with a panel from HQ, ERDC and the Hurricane and Storm Damage Reduction Planning Center of Expertise on documenting the quality of models used by the Corps in planning investigations. The model certification panel will include Harry Kitch (HQ), Larry Cocchieri (NAD) and Joan Pope (ERDC).

Topics will include:

- The Planning Model Improvement Program and the process of Model Certification
- Certification Protocol for documenting model theory and technical quality
- Current “pilot” tests to certify models – substance and process
- Peer support in new model development
- Documenting model quality in ITR until models are certified
- Implications for R & D and engineering models
- Future actions in model certification

TIME: Tuesday 9 May, 1:30-3:30

ROOM: Elizabethan Room D

TOPIC: Perspectives on Adaptive Management

MODERATOR: Jan Rasgus, Headquarters

While Corps' experience and expertise in ecosystem restoration have grown substantially, certain institutional constraints associated with authority and appropriations have been viewed by some as a hindrance to the Corps' ability to effectively incorporate adaptive management in its Ecosystem Restoration projects. This panel will present a range of views addressing current policy and Administration views as well as the inherent challenges, and will offer ideas on how to overcome constraints.

The panel will be comprised of:

- Bill Brostoff, San Francisco District, Corps of Engineers (Hamilton Wetlands)
- G. Matt Kondolf, University of California, Berkeley; member, Environmental Advisory Board
- Mark McKevitt, Office of the Assistant Secretary of the Army for Civil Works
- Jan Rasgus, Headquarters, Corps of Engineers
- Denise J. Reed, University of New Orleans; member Environmental Advisory Board